Business Problem

In recent years, City Hotel and Resort Hotel have seen significant cancellation rates. As a result, each hotel is facing a variety of difficulties, including lower revenues and less than optimal hotel room use. As a result, decreasing cancellation rates is the major aim of both hotels in order to boost their revenue generation efficiency and our ability to provide comprehensive business guidance to handle this issue.

The major themes of this research are the examination of hotel booking cancellations and other factors that have no influence on their company or annual revenue creation.

Assumptions

1. No exceptional events between 2021 and 2023 will have a significant influence on the data utilized.

2. The information is still current and may be utilized to effectively examine a hotel's potential plans.

3. There are no unintended consequences to the hotel using any recommended approach.

4. The hotels are not currently implementing any of the offered solutions.

5. The most significant element influencing the success of money generation is booking cancellations.

6. Cancellations leave rooms empty for the duration of the booking.

7. Clients make hotel arrangements in the same year they cancel.

Questions

1. What elements influence hotel reservation cancellations?

2. How can we improve hotel reservation cancellations?

3. How will hotels receive assistance in making pricing and promotional decisions?

Hypothesis

1. More cancellations occur as prices rise.

2. When the waiting list is larger, clients are more likely to cancel.

3. Most clients make their arrangements through online/offline travel agents.

Analysis & Findings
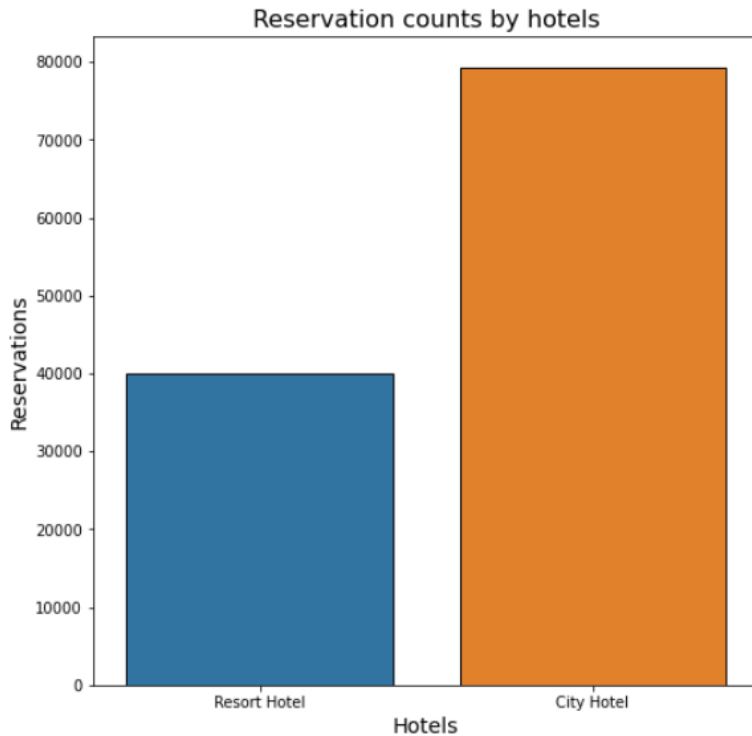
79330 guests made reservations to stay at City Hotel and 40060 booked Resort Hotel which means almost double the number of guests preferred City Hotel over Resort Hotel. This might be because the City Hotel provides better amenities and comfort at lower prices compared to Resort Hotel.
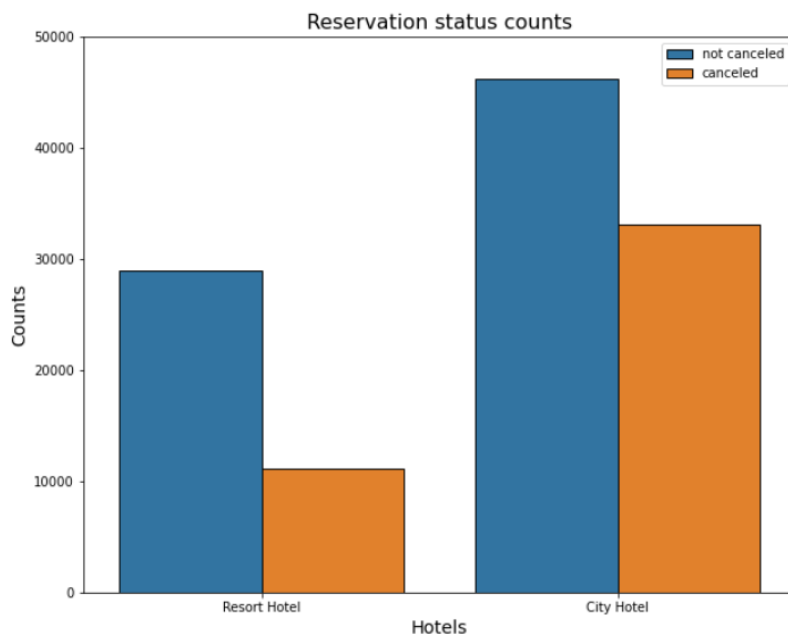

The City Hotel has more bookings, i.e. 66% of total bookings but also the cancellation rate is higher (38%) while cancellation for Resort Hotel is 25%. It is possible that the Resort Hotel is expensive than the City Hotel.

Room Prices Per Night Over Months
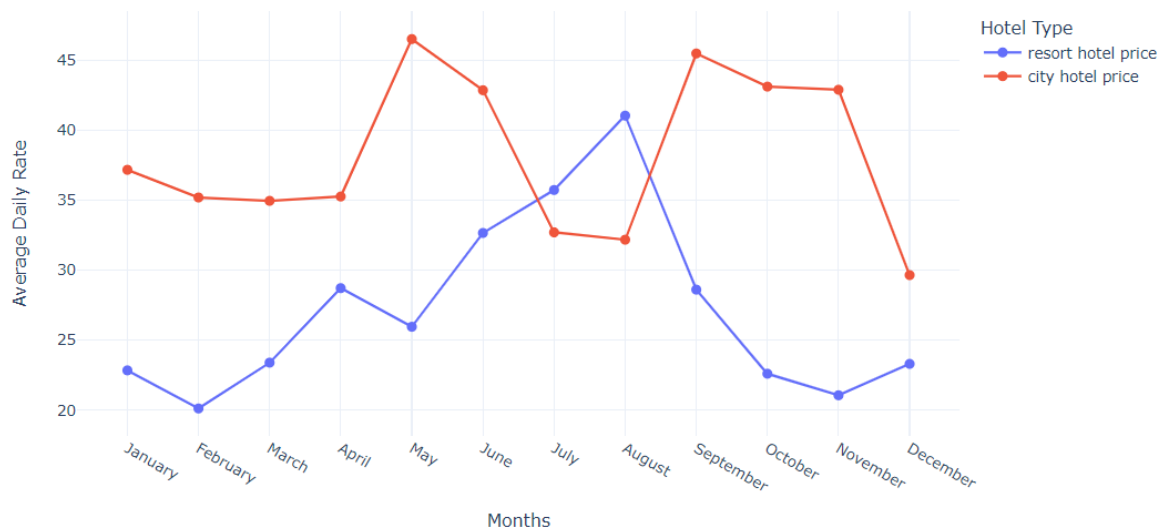
The line graph depicts that Resort Hotel average daily rate per person increases gradually and peaks at 41 in August. Decreases significantly during the last quarter of the year. City Hotel is distributed unevenly over the year. Although, the prices go over 45 in May.

Cancelations by hotels
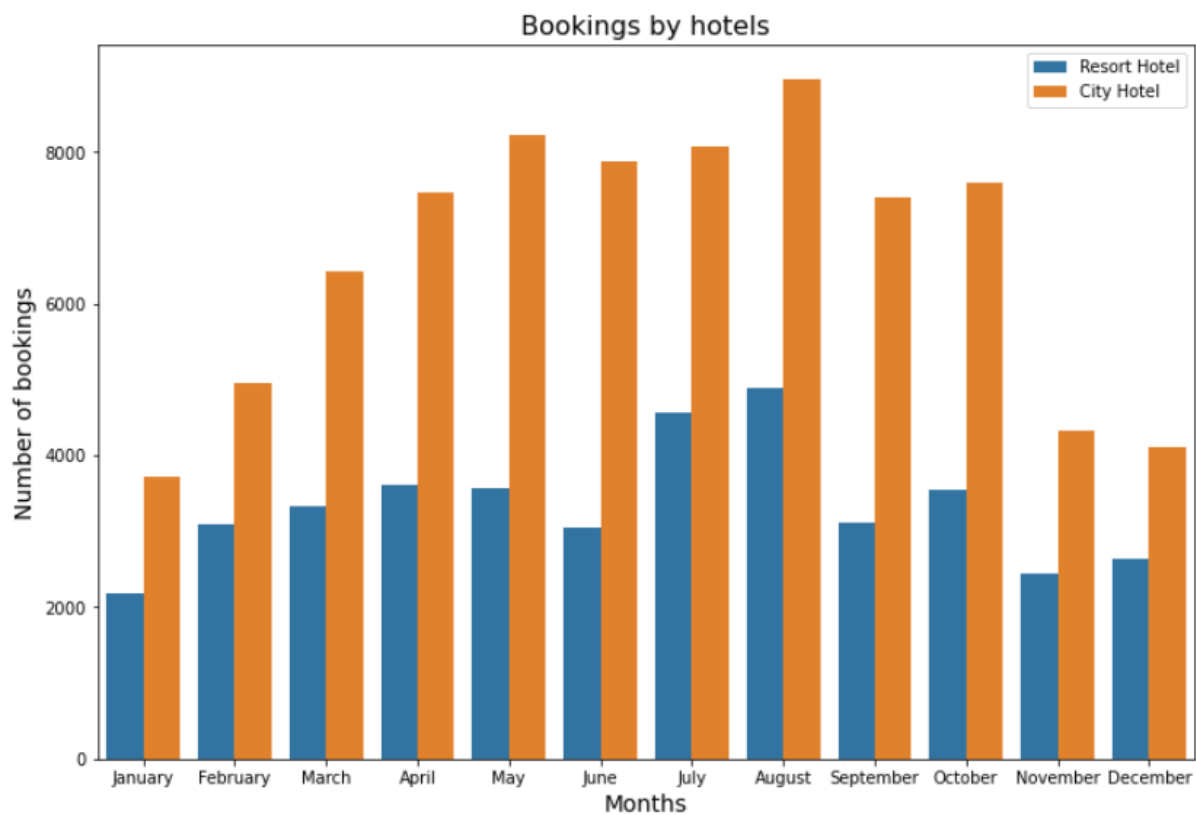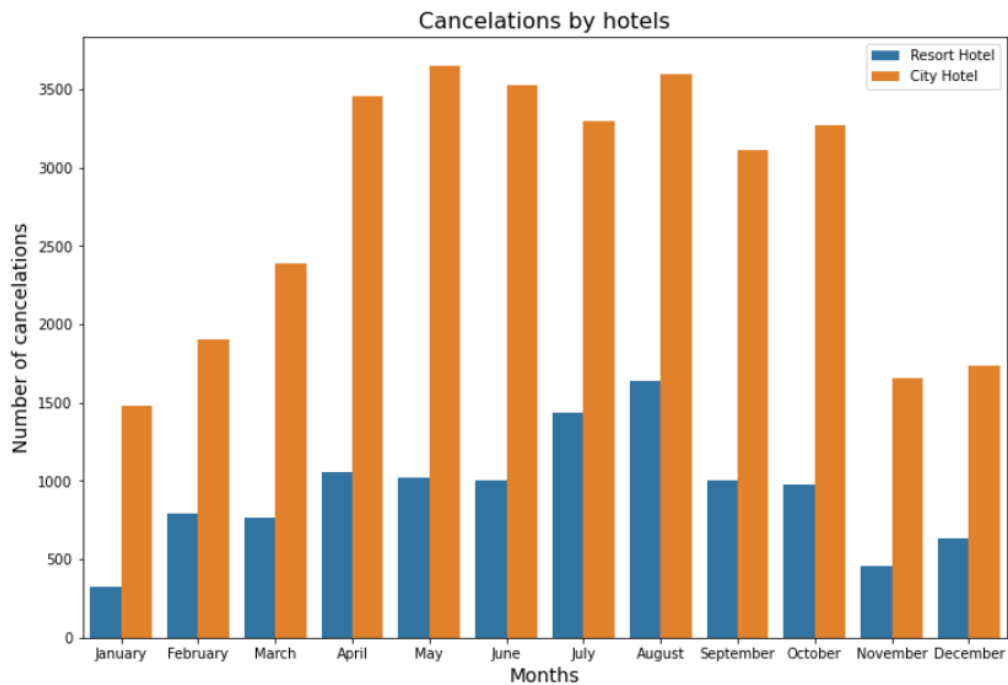
The above two bar plots show the bookings and cancellations for each hotel, which clearly describes that August had the highest number of bookings for both hotels. But the number of cancellations for the Resort Hotel was at its peak in August and the City Hotel had the highest cancellations in May. So, it is clear from the above line chart and bar charts that when the prices are highest, there are a greater number of cancellations.


Reservation status per month
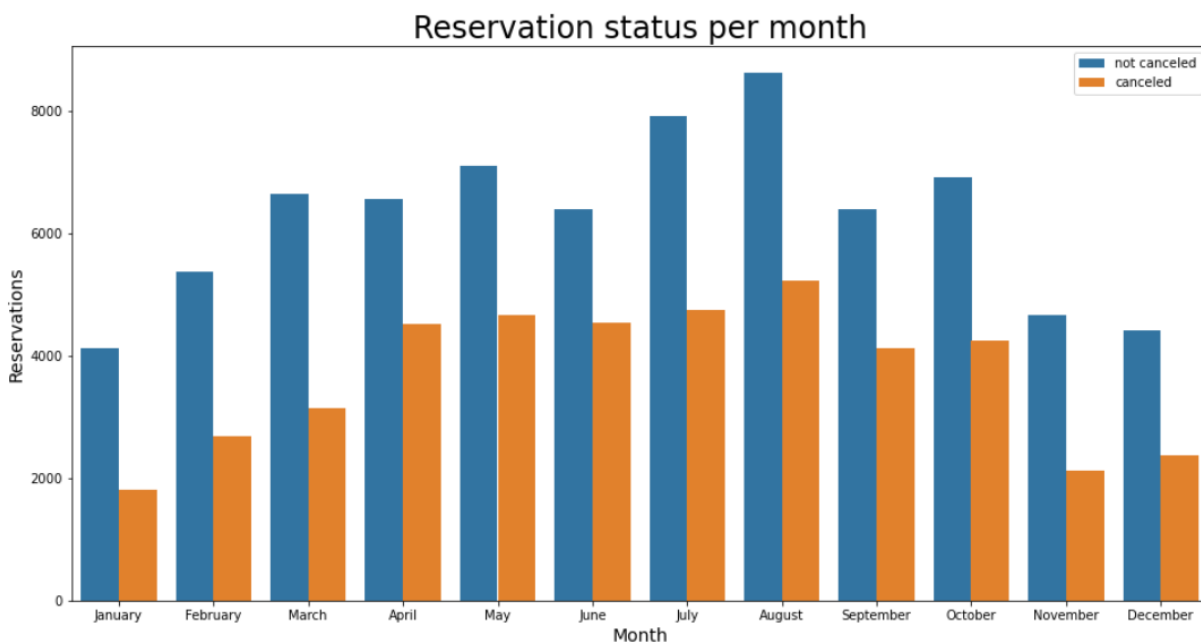
We created a grouped bar graph to analyze months with highest and lowest reservation levels. As we can see, both the number of confirmed as well as canceled reservations are highest in August whereas January has the least canceled reservations.
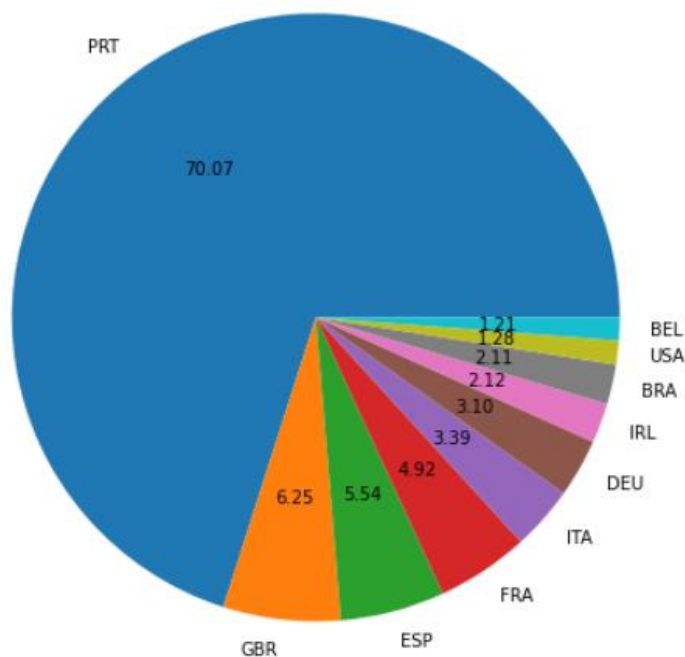
Average Daily Rate per Month
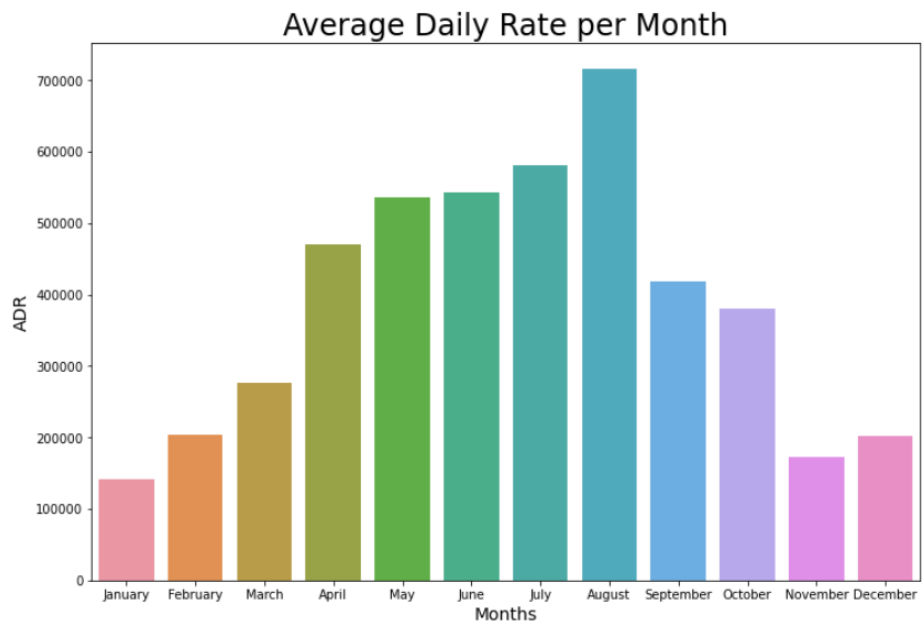
It can be observed that August has the highest average daily rate while January has the least. Therefore, August has the highest cancellations and January has the lowest cancellations. So, it can be concluded that the cost of accommodation is solely responsible for cancellations.
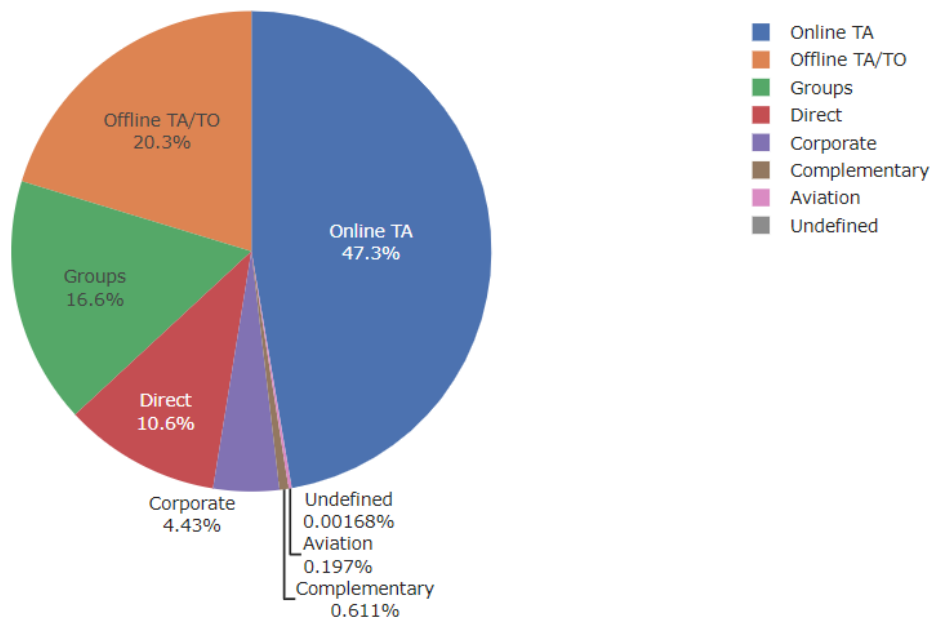
Guests by Country
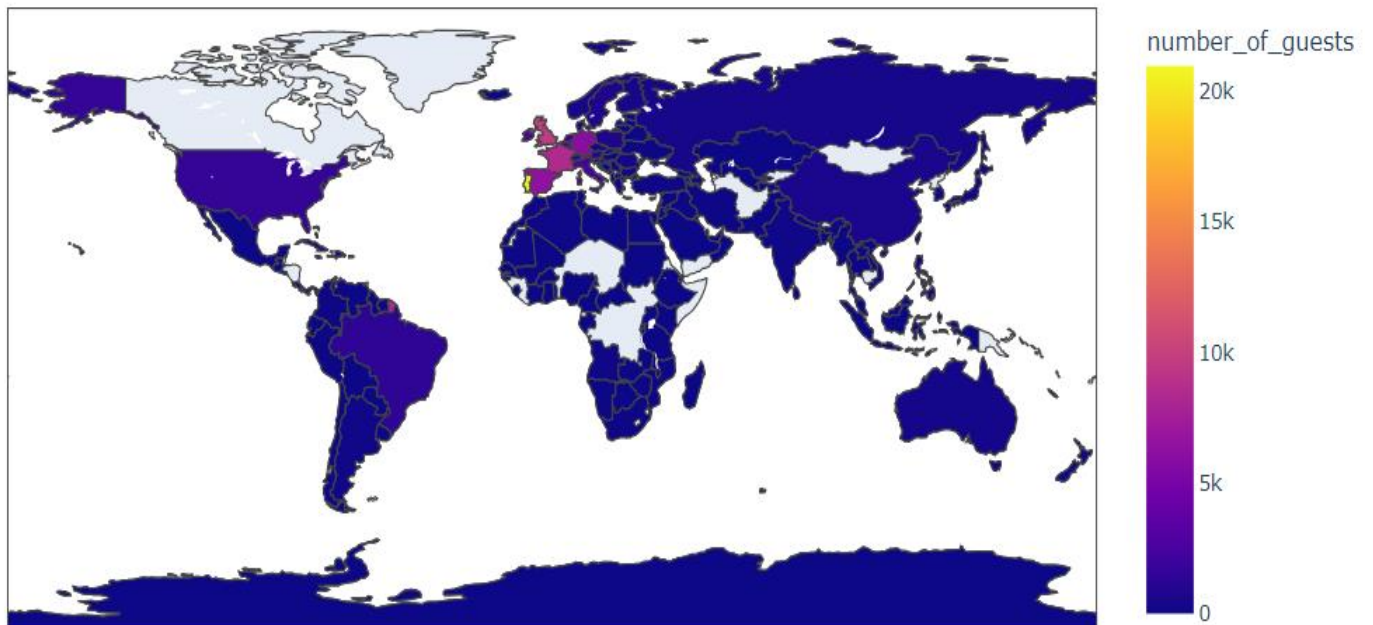
Top 10 countries with cancelation

It is displayed in the map that most number of guest visits are from Portugal (20,977) but the above pie chart displays that 70% cancellations are also from Portugal.

Bookings per market segment

The pie chart depicts that more than 65% of the guests book the hotels from online/offline travel agents which is further divided into 47% from online TA and 20% from offline TA's.

Total number of stays for Resort Hotel
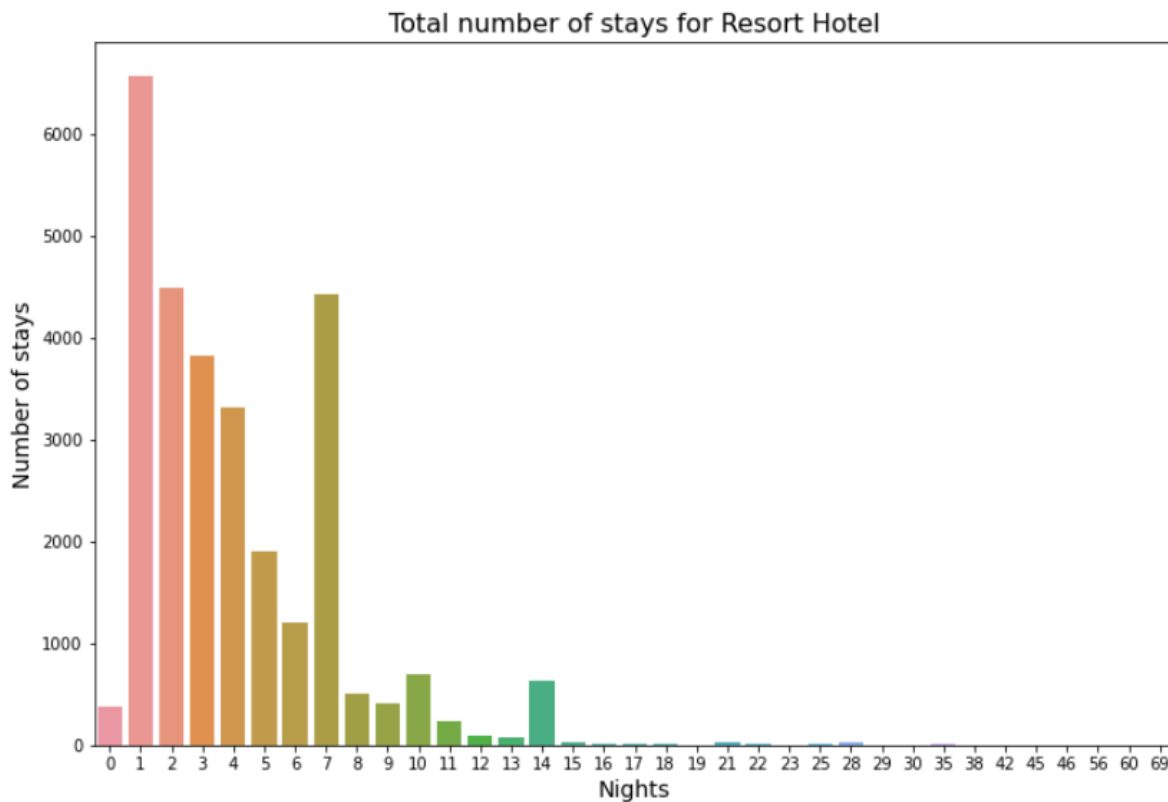
Most of the guests (6579) prefer to stay for just one night at the Resort Hotel. It might also be the case that the Resort Hotel is more expensive, that's why most people stay for 1 night. So, it can be said that mostly guests who have meetings or lonely travelers visit here. Later, the trend decreases in descending order. It can also be said that guests usually visit for weekends (2 nights).

Total number of stays for City Hotel
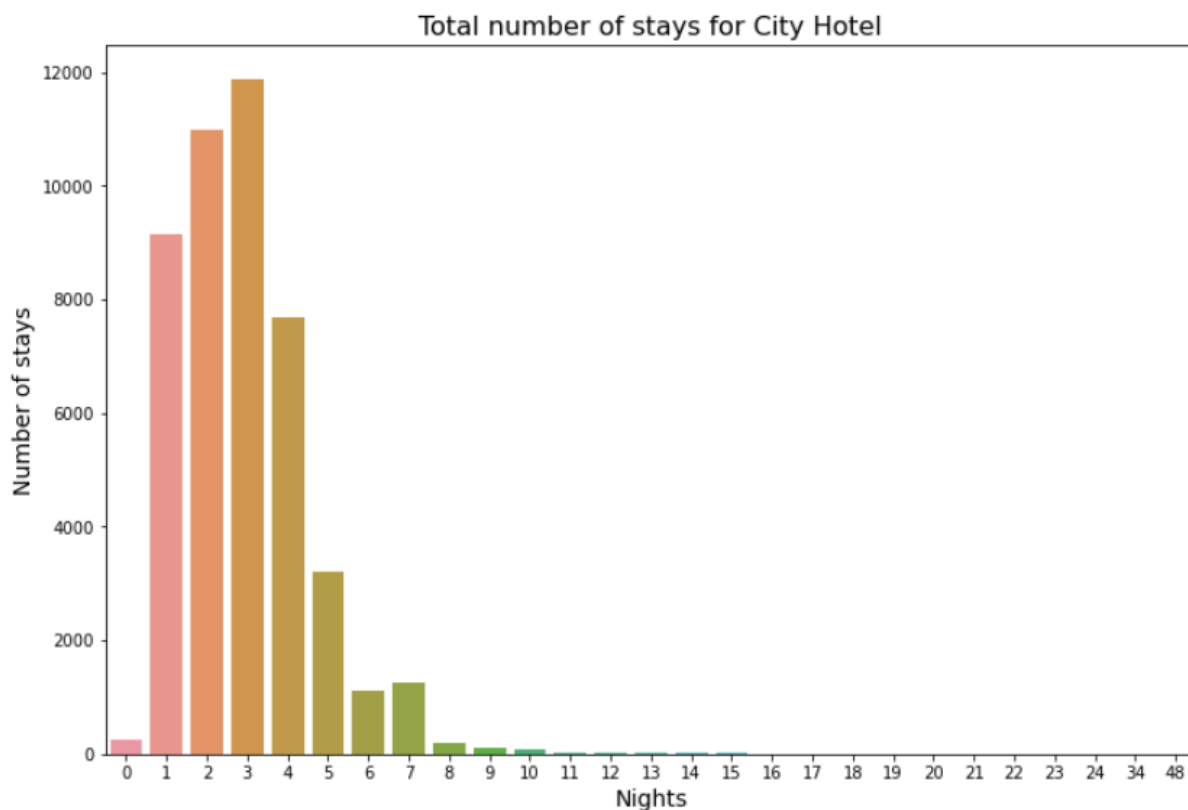
Most of the guests (11889) prefer to stay for three nights at the City Hotel. Staying for 1-3 nights is popular in the City Hotel, which shows that it could be more popular among families who come for vacation. This depicts that the City Hotel might be less expensive compared to another hotel.

<u>Suggestions</u>

1. Cancellation rates are directly proportional to hotel prices. So, the higher the price the more the cancellations. The cancellation ratio is higher in City Hotel compared to Resort Hotel. To solve this issue, hotels should work on their pricing strategy and lower them as per location. They can also provide discounts or offers to the customers to attract them.
2. Most of the guests stay in the City Hotel between 1-3 days and just 1 day at the Resort Hotel. So, the hotels should provide reasonable discounts on room prices at the Resort Hotel to increase the staying time of guests.
3. In the month of August, hotels should start campaigns or marketing with reasonable amounts to increase their revenue as the cancellation is highest in this month.
4. They should increase their quality and services mainly in Portugal to reduce the cancellation rate.
5. The hotels should keep track of how their services, prices and quality are displayed on websites by the online travel agents and suggest them to show the correct ratings and reality.